## C L A I M S

1. Digital document (D), in particular a contract, for transactions or conclusions of contracts between contracting parties in a communications network (I), having a document format with standardized fields for the indication of identities of the contracting parties (A, B) and for the indication of contractual modalities, whereby the fields consist in each case of a standardized field descriptor and at least one allowed value for this field descriptor, so that in particular on the basis of digital signatures (S) an automated carrying out of transactions or conclusion of contracts is made possible.

2. Digital document (D), in particular a contract, according to claim 1,
characterized in that,
further fields are provided for the indication of the legal statuses of the contracting parties (A, B), for the indication of contractual rights and duties of the contracting parties, for the indication of payment methods, for the indication of duties to deliver up or safe keeping and/or for the indication of circumstances attendant upon the contract.

3. Digital document (D), in particular a contract, according to claim 2,
characterized in that,
the fields for the indication of circumstances attendant upon the contract include a field for the indication of further documents or information related to the coming into existence of the digital document.

4. Digital document (D), in particular a contract, having a digital document format in accordance with

claim 2 or 3,

characterized in that,

the field for the indication of the contractual rights and duties includes a list of the contractual rights and duties of the contracting parties (A, B) or contains a reference to a further document which contains these indications.

5. Digital document (D), in particular a contract, according to claim 4,

characterized in that,

the field for the indication of documents or data related to the coming into existence of the document contains a list of the documents which contains these indications or includes a unambiguous reference to documents which contain these indications.

6. Digital document (D), in particular a contract, according to claim 4 or 5,

characterized in that,

each digital signature (S) is certified by means of a certificate (Z), whereby each certificate contains a policy or a reference to a policy stating consequences for the non-fulfillment of the conditions agreed in the document.

7. Digital document (D), in particular a contract, according to claim 6,

characterized in that,

in each case there is provided a field for the indication of an identity feature for each contracting party (A, B), whereby each such field contains a public digital signature test key of the contracting party concerned with an indication of the associated certificate.

8. Digital document (D), in particular a contract,

according to claim 6 or 7,

characterized in that,

the policy defines the circumstances under which the legal (non-pseudonymous) identities of the contracting parties (A, B) are to be revealed.

9. Digital document (D) in particular a contract, according to claim 8,

characterized in that,

the policy contains a reference to a (or possibly a plurality of) third party or third parties (C), which upon the occurrence of the corresponding circumstances reveals or reveal the identity of one contracting party (A) for the other contracting party (B).

10. Digital document (D), in particular a contract, according to claim 8 or 9,

characterized in that,

the policy defines the circumstances for the fulfillment of open responsibilities or for the provision of equal-valued substitute performances.

11. Digital document (D) in particular a contract, according to claim 10,

characterized in that,

the policy contains a reference to a (or if applicable a plurality of) third party or third parties, which upon occurrence of corresponding circumstances fulfils or fulfil the open responsibilities of a contracting party vis-a-vis another contracting party or provides equal-valued substitute performances.

12. Digital document, in particular contract, according to any of claims 8 to 11,

characterized in that,

the policy contains the indication of a document format so that the certificate (Z) is only valid when the digital document complies with the indicated document format.

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13. Digital document (D), in particular a contract, according to claim 12, characterized in that, the indication of the document format contains a

10 format description which defines the standardized fields of the document format and provides them with an unambiguous significance.

14. Digital document (D), in particular a contract,
15 according to claim 13, characterized in that, the format description defines a field with a reference to further format descriptions, which define further valid fields for the document format.

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15. Data processing device (P), in particular a proxy server, for assuming witness function in the automated carrying through of transactions or conclusion of contracts between contracting parties
25 (A, B) in a communications network (I), whereby the data processing device is configured for the automated receipt, intermediate storage and passing on of digital documents (D) according to any of claims 1 to 14.

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16. Data processing device (P), in particular a proxy server, in accordance with claim 15, characterized in that, received documents (D) are provided with a time stamp
35 before they are intermediately stored or passed on.

17. Data processing device (P), in particular a proxy

server, according to claim 15 or 16,
characterized in that,
received documents (D) are digitally signed.

18. Data processing device (P), in particular a proxy
server, in accordance with claim 17,
characterized in that,
a document (D) received from one contracting party
(A) is digitally signed, passed on to the other
contracting party (B) and intermediately stored at
least until reception of confirmation of receipt.

19. Data processing device (P), in particular a proxy
server, in accordance with 15 or 16,
characterized in that,
a document (D) received from one contracting party
(A) and provided with a digital signature (S) is
passed on to the other contracting party (B) without
the digital signature, whereby only after receipt of
the document from the other contracting party,
together with digital signature (S), is the document
(D) digitally signed by the one (A) and by the other
(B) contracting party sent back to the two
contracting parties (A, B). For this data processing
device the name "E-Witness" or "Online-Witness" or
"Online-Zeuge" is claimed.

20. Data processing device (C) for assuming guarantee
functions in automated transactions or conclusions of
contracts between contracting parties (A, B) with the
employment of digital documents (D) in accordance
with any of claims 1 to 14 in a communications
network (I), whereby in dependence upon conditions
laid down in a digital document (D) guaranteed
performances are provided.

21. Data processing device (C) for assuming guarantee

functions in accordance with claim 20,
characterized by
a certification mechanism for the issue of certificates (Z) of identities, whereby each certificate contains a policy or a reference to a policy setting out consequences for the non-fulfillment of responsibilities agreed in a contract.

22. Data processing device (C) for assuming guarantee functions in accordance with claim 20 or 21, characterized by
an identity administration mechanism for the administration of pseudonymous and non-pseudonymous identities of contracting parties (A, B).

23. Data processing device (C) for assuming guarantee functions in accordance with claim 22, characterized in that,
the identity administration mechanism discloses the legal (non-pseudonymous) identity of a contracting party (A), in dependence upon the non-fulfillment of responsibilities laid down in a contract, with respect to the other contracting party (B) or a third party.

24. Data processing device (C) for assuming guarantee functions in accordance with claim 22, characterized in that,
the identity administration mechanism guarantees, for a pseudonymous identity of a contracting party (A), the contractually agreed payment of a particular sum of money with respect to the other contracting party (B).

25. Data processing device (C) for assuming guarantee functions in accordance with claim 24, characterized in that,

the identity administration mechanism, instead of the indication of an identity for a contracting party, signs for the presence of a particular sum of money in a contract.

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26. Computer software for automated transactions or conclusions of contracts between contracting parties (A, B) in a communications network (I) on the basis of digital documents according to any of claims 1 to 10  14, whereby the computer software, when it is installed on a data processing device of the communications network (I), automatically generates such digital documents, if applicable signs them, and sends them to a contracting party.

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27. Computer software according the claim 26, characterized in that, it automatically checks a document (D) received from a contracting party (A), if appropriate alters the 20  document, and sends it back to the contracting party (B).

28. Computer software according the claim 26 or 27, characterized in that, 25  it makes possible the dynamic administration of identity attributes, kinds of identification and further attributes, which relate to a person, if applicable with a qualified certificate.

30  29. Computer software according the claim 26, 27 or 28, characterized in that, it makes possible the administration of personal profiles made available to third parties.

35  30. Computer software according to any of claims 26 to 29, characterized in that,

it locally collects and administers a shopping basket for routine purchases on the basis of the documents or contracts according to claims 1 to 14.